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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/466,025	12/17/1999	PATRICK A. RAYMOND	COMP:0078/FLE	9687

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EXAMINER

HUYNH, KIM T

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/466,025	RAYMOND ET AL.
	Examiner Kim Huynh	Art Unit 2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.

- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-18 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Notice to Applicant(s)

This application has been examined. Claims 1-18 are pending.

Response to Arguments

1. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4-6, 9-12 and 15-17 rejected under 35 U.S.C. 102(b) as being anticipated by MacGregor et al. (U.S Patent 5,525,795)

- a. As per claims 1, 6 and 12 MacGregor discloses:

- an electromagnetic energy source (fig.12, 132) located on a first side of a system board proximate an connector, the electromagnetic energy source for generating electromagnetic energy directed at least toward a second opposing side of the system board. (col.7, lines 7-19, col.2, lines 54-67, col.3, lines 1-13;

wherein, electrically, magnetically, optically and mechanically connected is energy source)

- An electromagnetic energy detector located on the second side of the system board the electromagnetic energy detector for detecting a presence of electromagnetic energy when a hot-pluggable component is not mated to the connector and the electromagnetic energy is thereby unobstructed by the hot-pluggable component, the electromagnetic energy detector further for detecting an absence of electromagnetic energy when the hot-pluggable is mated to the connector and the electromagnetic energy is thereby obstructed by the hot-pluggable component.(col.7, lines 20-28, col.6, lines 60-66), (col.7, lines 5-30)
- b. As per claim 4, MacGregor discloses the electromagnetic energy is infra-red energy magnetic energy or ultrasonic energy. (col.3, lines 11-13)
- c. As per claim 5, MacGregor discloses the connector is one of an edge connector, a cable connector, a fibre channel connector and a USB connector. (col.5, lines 14-15), (col.3, lines 13-19)
- d. As per claims 9 and 11, MacGregor discloses the connector is an edge connector. (col.5, lines 29-36)
- e. As per claim 10, MacGregor discloses
- A first electromagnetic energy source located on a first side of a system board proximate a first end of a connector, the first

electromagnetic energy source for generating electromagnetic energy directed at least toward a second side of the system board opposing the first electromagnetic energy source; a second electromagnetic energy source located on the first side of the system board proximate a second end of the connector, the second electromagnetic energy source for generating electromagnetic energy directed at least toward the second side of the system board opposing the second electromagnetic energy source; a first electromagnetic energy detector located on the second side of the system board, the first electromagnetic energy detector for detecting a presence of electromagnetic energy from the first electromagnetic energy source when a hot-pluggable component is not mated to the connector and the electromagnetic energy from the first electromagnetic energy source is thereby unobstructed by the hot-pluggable component, the first electromagnetic energy detector further for detecting an absence of the electromagnetic energy from the first electromagnetic energy source when the hot-pluggable component is mated to the connector and the electromagnetic energy from the first electromagnetic energy source is thereby obstructed by the hot-pluggable component. A second electromagnetic energy detector located on the second side of the system board, the second electromagnetic energy detector

for detecting a presence of electromagnetic energy from the second electromagnetic energy source when the hot-pluggable component is not mated to the connector and the electromagnetic energy from the second electromagnetic energy source is thereby unobstructed by the hot-pluggable component, the second electromagnetic energy detector further for detecting an absence of the electromagnetic energy from the second electromagnetic energy source when the hot-pluggable component is mated to the edge connector and the electromagnetic energy from the second electromagnetic energy source is thereby obstructed by the hot-pluggable component. (see abstract, lines 1-26), (col.6, lines 51-67), (col.7, lines 1-30)

- f. As per claim 15, MacGregor discloses locating a material which is impervious to the electromagnetic energy at a position on the hot-pluggable component is mated to the connector. (col.7, lines 7-30), (col.3, lines 1-13)
- g. As per claim 16, MacGregor discloses generating the electromagnetic energy comprises the step of generating a beam of electromagnetic energy directed toward the second opposing side of the system board. (col.7, lines 11-19)
- h. As per claim 17, MacGregor discloses generating a plurality of independent beams of electromagnetic energy directed toward the second

opposing side of the system board, a source of each of the plurality of beams located progressively more distant from the system board. (col.7, lines 11-19), (col.3, lines 1-41)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 ,7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacGregor et al. (U.S Patent 5,525,795)

Although MacGregor fails to discloses a processor for communicating with the electromagnetic energy detector for receiving the detection of the presence or absence of electromagnetic energy by the electromagnetic energy detector. However, MacGregor does teach motor controller(122).

Examiner take Official Notice that controllers and processors are well known in the art for providing a means of receiving and interpreting signals in order to perform a desired function.

It would have been obvious one having ordinary skills in the art at the time the invention was made to have a processor or a controller to receive an indication of the

presence or absence of a device so that it may inform the rest of the system of the presence or absence, thereby allowing the system to take advantage of a newly inserted device or preventing accessing errors when a device has been removed.

6. Claims 3, 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacGregor et al. (U.S Patent 5,525,795) in view of Lien et al. (U.S Patent 5,386,567)

MacGregor discloses all the limitations as above except the limitation that a hard drive for storing an indication of the hot-pluggable component is absent when the presence of electromagnetic energy is detected, the hard drive further for storing an indication of the hot-pluggable component is absent when the absence of electromagnetic energy is detected. However, Lien discloses the adapter contains an attribute information store 13 which store adapter identity information and other information. (col.3, lines 63-68). Furthermore, Lien discloses stored configuration information to reflect removal of adapter from the respective slot. (col.7, lines 5-35), (also see abstract, lines 1-31)

It would have been obvious one having ordinary skills in the art at the time the invention was made to incorporate Lien's teaching into MacGregor's method to have the hard drive to store, retrieve, and detect data from the hot-pluggable components for a greater reliability and serviceability in computer system.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacGregor et al. (U.S Patent 5,525,795) in view of Eisele et al. (U.S Patent 6,189,055)

MacGregor discloses all the limitations as above except the limitation that the electromagnetic energy is infra-red energy. However, Eisele discloses some devices use infra-red beams to communicate between the device and the PC. (col.3, lines 29-33)

It would have been obvious one having ordinary skills in the art at the time the invention was made to incorporate Eisele's teaching into MacGregor's method to have infra-red energy as energy source for a better detecting source for the presence or absence of hot-pluggable components in computer system.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Kim Huynh, whose telephone number is (703)305-5384 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on Monday-Friday from 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Wong, can be reached on (703)305-3477 or via e-mail addressed to [Peter.Wong@uspto.gov]. The fax number for this Group is (703)746-9224.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)305-3900.

Kim Huynh

September 19, 2002

Sumati Lefkowitz
SUMATI LEFKOWITZ
PRIMARY EXAMINER